



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,184	01/03/2006	Yoshitsugu Morita	71,051-003	7050

27305 7590 05/28/2008
HOWARD & HOWARD ATTORNEYS, P.C.
THE PINEHURST OFFICE CENTER, SUITE #101
39400 WOODWARD AVENUE
BLOOMFIELD HILLS, MI 48304-5151

EXAMINER

WESTERBERG, NISSA M

ART UNIT	PAPER NUMBER
----------	--------------

1618

MAIL DATE	DELIVERY MODE
-----------	---------------

05/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,184	MORITA ET AL.	
	Examiner	Art Unit	
	Nissa M. Westerberg	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 11 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 5, 8 - 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/1/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election of group I in the reply filed on April 17, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112 2nd Paragraph

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 provides for the use of an aqueous emulsion, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

For the purposes of applying art below, this claim has been interpreted as a composition claim in which the emulsion according to claim 1 is a component of a cosmetic material. If Applicant did not intend for this claim to be a composition claim, Applicant is required to amend the claim to clearly recite the subject matter being claimed. If such an amendment is made, the next action may be made final.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1618

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 – 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dalle et al. (US 6,013,682).

Dalle et al describes silicone in water (aqueous) emulsions (col 1, ln 7 – 9). In examples 1 – 3 (col 7, ln 49 – col 8, ln 10), a polydimethylsiloxane terminated with dimethylvinylsiloxy groups (component (A) of the instant claims) and a liquid organohydrogenpolysiloxane having an average formula of $\text{Me}_2\text{HSiO}(\text{Me}_2\text{SiO})_{20}\text{SiMe}_2\text{H}$ (component (B) of the instant claims, a polyorganosiloxane oil) are used to prepare an aqueous emulsion (col 7, ln 67 - col 8, ln 1). Component (B) does not contain any hydrosilation-reactive groups. The ratio of A:B in the three examples are 1:0.03, 1:0.03 and 1:0.06 respectively. The kinematic viscosity (units of mm^2/sec) of component (A) as well as the kinematic viscosity of the resulting emulsions at 25°C was also reported. The molecular weight of the silicone can be in the range of about 1 mm^2/sec at 25°C to in excess of $10^8 \text{ mm}^2/\text{sec}$ at 25°C .

The claims of the instant application recite limitations on the viscosity in terms of the absolute or dynamic viscosity (units of $\text{mPa}\cdot\text{s}$) at 25°C . Applicant has prepared formulations using polydimethylsiloxane terminated with dimethylvinylsiloxy groups and dimethylpolysiloxanes in which both ends are blocked by dimethylhydrogensiloxy groups, the same polymers as recited in the prior art. The number-average molecular weight of component (A) is not disclosed in the specification, although the number average molecular weight of the final polymer is recited in table 1 (p 27). It appears that

Art Unit: 1618

the aqueous emulsions of Dalle et al. inherently meet the limitations as to the dynamic viscosity and number average molecule weight of the compositions as polymers exemplified by Applicant as being within the scope of the claims are also taught in the aqueous emulsions of the prior art.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1618

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 4 and 8 – 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalle et al. (US 6,013,682).

Dalle et al. describes silicone in water (aqueous) emulsions (col 1, ln 7 – 9). In examples 1 – 3 (col 7, ln 49 – col 8, ln 10), a polydimethylsiloxane terminated with dimethylvinylsiloxy groups (component (A) of the instant claims) and a liquid organohydrogenpolysiloxane having an average formula of $\text{Me}_2\text{HSiO}(\text{Me}_2\text{SiO})_{20}\text{SiMe}_2\text{H}$ (component (B) of the instant claims) are used to prepare an aqueous emulsion (col 7, ln 67 - col 8, ln 1). The molecular weight of the silicone can be in the range of about 1 mm^2/sec at 25°C to in excess of $10^8 \text{ mm}^2/\text{sec}$ at 25°C . For the polysiloxane components, a polymer length that results in a viscosity between about 1 and about $1 \times 10^6 \text{ mm}^2/\text{sec}$ at 25°C are preferred (col 2, ln 42 – 67).

The emulsions taught by Dalle et al. are useful in the standard applications for silicon emulsions, including skin creams, facial treatments, personal and facial cleansers, hair shampoos, hair conditioners, hair sprays and mousses (col 7, ln 7 – 19).

Dalle et al. does not explicit state the number average molecular weight of the organosilicon polymers or explicitly prepare a cosmetic composition comprising the aqueous emulsions.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the emulsion in cosmetic compositions such as a hair shampoo or skin cream, as Dalle et al. discloses that the use of silicone emulsions in such products is a standard application. Dalle et al. discloses that polymers with a wide range of viscosities and thus molecular weights. Variations in the molecular weight of a polymer lead to variations in the viscosity of the polymer and given the wide range of viscosities disclosed by Dalle et al., silicon containing polymers whose number-average molecular weight is at least 100,000 are encompassed by the disclosure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nissa M. Westerberg whose telephone number is (571)270-3532. The examiner can normally be reached on M - F, 8 a.m. - 4 p.m. ET. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Hartley can be reached on (571) 272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618

NMW